



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/689,092	10/12/2000	Motoki Kobayashi	SONY-U0297	8331

29175 7590 09/04/2003

BELL, BOYD & LLOYD, LLC  
P. O. BOX 1135  
CHICAGO, IL 60690-1135

EXAMINER

PILLAI, NAMITHA

ART UNIT	PAPER NUMBER
----------	--------------

2173

DATE MAILED: 09/04/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/689,092

Applicant(s)

KOBAYASHI ET AL.

Examiner

Namitha Pillai

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure is objected to because there is an extra "of" in line 3 of the abstract. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 5,623,613 (Rowe et al.) and Excel 5.0 For Windows.

Referring to claims 1, 9 and 10, Rowe discloses an information processing apparatus comprising first display control means for controlling a display of an icon hierarchy including a plurality of first icons on a first hierarchical layer (reference number 52, Figure 2). Rowe discloses a plurality of second icons on a second hierarchical layer at a level lower than the first hierarchical (reference number 54, Figure 2). Rowe also discloses a plurality of third icons on a third hierarchical layer at a level lower than the second hierarchical layer (reference number 56, Figure 2). Rowe also discloses a plurality of fourth icons on a fourth hierarchical layer at a level higher than the first hierarchical layer at a level higher (reference number 90, Figure 2). Rowe discloses exhibiting an array of first icons as a column or a row on a screen and an array of second icons as another column or another row on the screen (Figure 2). See column 2, line 54-64.

Art Unit: 2173

Rowe also discloses that the number of first and second icons displayed on the display is based on what can be supported by the display screen (column 3, lines 23-29).

Rowe discloses that an array of the first icons and an array of the second icons are displayed on the screen to form an array hierarchical structure (Figure 2 and column 2, lines 56-60).

Rowe discloses an icon-specifying means for specifying a desired icon from the first or second icons displayed in the array hierarchical structure (reference number 60, Figure 2).

Rowe does disclose that the programming information can be divided into numerous categories and subcategories. Hence, Rowe has provided a control means by which users can choose icons to move along the viewing panel to the right (reference number 67, Figure 2 and column 8, lines 38-41). Rowe does not clearly state the changes of the hierarchical structure and the impact that more columns that are not displayable on the screen at one time would have for means for scrolling wherein, the hierarchical structure of the display would be changed. The second display controls as referred to represents the scrolling systems used in spreadsheet systems, wherein with a cursor movement, to the left or the right of a distinct column allows for manipulation of the layout of the layers that are shown. The Excel book discloses means for manipulating movement and changes to the spreadsheet, wherein as seen in Figure 1.1, the movement of the cursor to the right past the I column would cause a shift in the columns, wherein the first, second and third columns would be replaced as the spreadsheet is shifted to display the columns to the right and left of the columns that cannot be displayed in the initial screen (page 2, Figure 1.1 and page 14, line 4). It would have been obvious for one skilled in the art, at the time of the invention to learn from the Excel book to implement the spreadsheet

Art Unit: 2173

scrolling means for being the second display controller, wherein the initial columns that are displayed are shifted to the right and left and further changing the structure of the columns displayed. Rowe takes the form of a table or spreadsheet with the column and row basics with the scrolling for providing movement in the spreadsheet. In cases, where the information needs to be displayed for a column is not currently displayed but is to the right or left of the edges of the currently displayed columns, it is necessary to use the spreadsheet scrolling techniques from the Excel book for means for viewing the columns not supported by the display capabilities of the current screen. Hence, one skilled in the art, at the time of the invention would have been motivated to learn from the Excel book to implement the scrolling techniques to shift the column layout of the spreadsheet form.

Rowe and the Excel book also has provided a control means by which users can choose icons to move along the viewing panel to the left (Rowe, reference number 67, Figure 3 and column 8, lines 38-41). It is inherent that in order for users to see other subcategories displayed to the left side of the screen, the user will through the display control means change the hierarchical structure of the display. Hence, as the user chooses the first icon and moves to the left, the fourth new icons replace the first icons in the array hierarchical structure on the screen and the first icons replace the second icons in the array hierarchical structure on the screen.

Referring to claim 2, Rowe discloses that first to fourth icons may each represent a content or a class of a content (column 2, lines 54-56).

Referring to claim 3, Rowe discloses further having reception for receiving a content, content class or information relevant to a content or relevant to a hierarchical layer of contents (column 5, lines 29-34).

Art Unit: 2173

Referring to claim 4, Rowe discloses having control means for controlling display so as to exhibit information relevant to an icon specified by a the icon specifying (reference number 66, Figure 4) means or information relevant to a hierarchical layer to which the specified icon pertains (reference number 92 and 96, Figure 4).

Referring to claim 5, Rowe discloses having control means for controlling a display of a picture showing a route to one of the second icons (reference number 67, Figure 4).

Referring to claim 6, Rowe discloses having the capability of controlling a display so as to scroll the first and second icons when the displayed icons are updated (reference number 70, Figure 5 and column 9, lines 3-7).

Referring to claim 7, Rowe discloses icon-specifying means where an icon on a hierarchical layer at a level lower than a hierarchical layer specified by a cursor in accordance with an operation of a predetermined key for a first direction. Rowe also discloses specifying means for an icon on a hierarchical layer at a level higher than a hierarchical layer specified by a cursor in accordance with an operation of a predetermined key for a second direction. Rowe also discloses specifying an icon on the same hierarchical layer specified by a cursor in accordance with an operation of a predetermined key for a third or fourth direction. See reference number 67, Figure 3, column 8, lines 52-59.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe and Excel 5.0 For Windows and further in view of, Designing the User Interface (Ben Shneiderman).

Referring to claim 8, Rowe and Excel 5.0 For Windows do not disclose having a layer-count acquiring means for acquiring the number of hierarchical layers to be displayed.

Shneiderman discloses that users have constraints of screen displays especially concerning the

Art Unit: 2173

width and length (page 259, line 35). By allowing users to choose the number of layers to be displayed at one time can help those with small or large screens to view the display in the manner most convenient and appropriate to their system. It would have been obvious to one of ordinary skill in the art at the time the invention to modify Rowe and Excel 5.0 For Windows's invention such that there was a layer count acquiring means for acquiring the number of hierarchical layers to be displayed. Such a mechanism for acquiring the number of hierarchical layers to be displayed would provide choices to the user allowing them to have a satisfying and less confusing experience. Hence, one skilled in the art, at the time of the invention would have been motivated to learn from Shneiderman and implement a means for allowing users to customize the display screen based on the screen displays they are working with and based on what is most convenient for the user.

***Response to Claim Changes***

4. The Examiner acknowledges the Applicant's amendments to claims 2, 9 and 10 of changes made to overcome the 35 U. S. C. 112 rejection and other minor syntax changes.

***Response to Arguments***

5. Applicant's arguments filed 6/2/2003 have been fully considered but they are not persuasive.

With respect to Applicant's arguments that the cited reference does not disclose or suggest features of the second display control means for changing the array hierarchical structure displayed on the screen. Rowe does provide the means as with the scrolling techniques, wherein in addition to the scrolling means (reference number 67, Figure 2) and the addition of columns well past the edge of the column 66 would make it necessary to scroll wherein the selections

Art Unit: 2173

made by the user would change the structure of the hierarchal layer, where the column past the edge of the last column currently displayed would be displayed causing the change in the hierarchical structure of the display. As Rowe does not clearly state such an example, these methods are common in spreadsheet systems, wherein through scrolling the user through selection can access a column wherein the structure of the current columns would have to be rearranged and changed in the display to make changes for the display of the new column that was previously not displayed. The scrolling being to the left and right of the columns, as is common in spreadsheet systems.

### *Conclusion*

6. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach a method for displaying a hierarchy of menus with icons.

Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington D.C. 20231.

If applicant desires to fax a response, (703) 746-7238 may be used for formal After Final communications, (703) 746-7239 for Official communications, or (703) 746-7240 for Non-Official or draft communications. NOTE: A Request for Continuation (Rule 60 or 62) cannot be faxed. Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).



Art Unit: 2173


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Namitha Pillai whose telephone number is (703) 305-7691. The examiner can normally be reached on 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Namitha Pillai  
Assistant Examiner  
Art Unit 2173  
August 25, 2003



RAYMOND J. BAYERL  
PRIMARY EXAMINER  
ART UNIT 2173